

WHAT IS CLAIMED IS:

1. An image forming apparatus to which a developing apparatus for developing a latent image on an image bearing member corresponding to image  
5 information is detachably attachable, comprising:  
a first detection device for detecting an amount of developer in said developing apparatus;  
a second detection device for detecting a utilized amount of the developer in said developing  
10 apparatus based upon the image information; and  
a processing unit for judging a utilized amount level of said developing apparatus based upon results of detection of said first detection device and said second detection device,  
15 wherein said processing unit judges the utilized amount level of said developing apparatus using the result of detection of said first detection device and the result of detection of said second detection device until the result of detection of  
20 said first detection device reaches a predetermined value, and judges the utilized amount level of said developing apparatus using the result of detection of said first detection device after the result of detection of said first detection device has reached  
25 the predetermined value.

2. An image forming apparatus according to

claim 1,

wherein said first detection device is an optical detection device of developer amount.

5           3. An image forming apparatus according to claim 1,

          wherein said developing apparatus has memory means for storing information on a result of detection of said first detection device or a result  
10 of detection of said second detection device.

          4. An image forming apparatus according to claim 3,

          wherein said memory means is nonvolatile memory  
15 means which is capable of communicating with a main body of said image forming apparatus in a contact state or in a non-contact state.

          5. A control method for an image forming  
20 apparatus to which a developing apparatus for developing a latent image on an image bearing member corresponding to image information is detachably attachable and which comprises a first detection device for detecting an amount of developer in said  
25 developing apparatus, and a second detection device for detecting a utilized amount of the developer in said developing apparatus based upon the image

information, the control method comprising:

a first judgment step of judging a utilized  
amount level of said developing apparatus using a  
result of detection of said first detection device  
5 and a result of detection of said second detection  
device until the result of detection of said first  
detection device reaches a predetermined value; and

a second judgment step of judging the utilized  
amount level of said developing apparatus using the  
10 result of detection of said first detection device  
after the result of detection of said first detection  
device has reached the predetermined value.

6. An image forming apparatus to which a  
15 developing apparatus including a developer carrying  
member for developing a latent image on an image  
bearing member is detachably attachable, comprising:

a first detection device for detecting an  
amount of developer in said developing apparatus;

20 a second detection device for detecting a  
utilized amount of said developer carrying member;  
and

a processing unit for judging a utilized amount  
level of said developing apparatus based upon results  
25 of detection of said first detection device and said  
second detection device,

wherein said processing unit judges the

utilized amount level of said developing apparatus  
based upon the result of detection of said first  
detection device and the result of detection of said  
second detection device until the result of detection  
5 of said first detection device reaches a  
predetermined value, and judges the utilized amount  
level of said developing apparatus based upon the  
result of detection of said first detection device  
after the result of detection of said first detection  
10 device has reached the predetermined value.

7. An image forming apparatus according to  
claim 6,

wherein said first detection device is an  
15 optical detection device of developer amount.

8. An image forming apparatus according to  
claim 7,

wherein said second detection device detects an  
20 operation time of said developer carrying member to  
judge the utilized amount of said developer carrying  
member.

9. An image forming apparatus according to  
25 claim 6,

wherein said developing apparatus has memory  
means for storing information on a result of

detection of said first detection device or a result of detection of said second detection device.

10. An image forming apparatus according to  
5 claim 9,

wherein said memory means is nonvolatile memory means which is capable of communicating with a main body of said image forming apparatus in a contact state or in a non-contact state.

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11. A control method for an image forming apparatus to which a developing apparatus including a developer carrying member for developing a latent image on an image bearing member is detachably  
15 attachable and which comprises a first detection device for detecting an amount of developer in the developing apparatus, and a second detection device for detecting a utilized amount of the developer carrying member, the control method comprising:

20 a first judgment step of judging a utilized amount level of said developing apparatus based upon a result of detection of said first developing apparatus and a result of detection of said second detection device until the result of detection of  
25 said first detection device reaches a predetermined value; and

a second judgment step of judging the utilized

amount level of said developing apparatus based upon the result of detection of said first detection device after the result of detection of said first detection device has reached the predetermined value.

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12. A developing apparatus detachably attachable to an image forming apparatus, comprising:

a developer container containing a developer;

10 a developer carrying member for developing a latent image on an image bearing member;

a memory area storing information on an amount of developer; and

a memory area storing information regarding a utilized amount of said developer carrying member.

15

13. A developing apparatus according to claim 12,

wherein said memory medium further comprises a memory area storing arithmetic operation coefficient  
20 information for finding a utilized amount of said developer carrying member.

14. A developing apparatus according to claim 12, further comprising a detection device for  
25 detecting the amount of developer.

15. A developing apparatus according to claim

14,

wherein said detection device is an optical developer residual amount detection device.

5           16. A memory medium which is mounted on a developing apparatus detachably attachable to an image forming apparatus,

          wherein said developing apparatus comprises a developer container containing a developer, and a  
10 developer carrying member for developing a latent image on an image bearing member, and

          said memory medium comprises:

          a memory area storing information on an amount of developer; and

15           a memory area storing information regarding a utilized amount of said developer carrying member.

          17. A memory medium according to claim 16, further comprising a memory area storing arithmetic  
20 operation coefficient information for finding a utilized amount of said developer carrying member.